

MAX M. MILLER, JR.

October 9, 2008

VIA EMAIL & FEDEX

Mr. Keith Large
Montana DEQ Remediation Division
1100 North Last Chance Gulch
Helena, MT 59601

Re: Comments of Stimson Lumber Company to the Draft Final Expanded
Engineering Evaluation / Cost Analysis for the Stimson Lumber Company
Cooling Pond

Dear Mr. Large:

This letter and its attachments are the comments of Stimson Lumber Company to the Draft Final Expanded Engineering Evaluation / Cost Analysis for the Stimson Lumber Company Cooling Pond, Missoula County, Montana, Prepared for Montana Department of Environmental Quality by Olympus Technical Services, Inc., dated September 2007 (the "EE/CA"). The EE/CA identifies several Remedial Alternatives but all except the "no action" and "institutional controls" alternatives are removal actions. The EE/CA selects Alternative 6 which is designed to result in both the removal of contaminated sediments from the cooling pond and the removal of the berm that creates the northern border of the pond. This remedy thereby effectively removes the cooling pond in its entirety. Stimson also proposes to remove contaminated sediments from the pond. However, removal of hazardous substances does not require removal of the pond itself, as soils in the pond perimeter do not contain contaminants above applicable cleanup standards.

Brief History of the Property and the Pond

The Bonner Mill site has been operated as a lumber and forest products mill since approximately 1886. It was built by a man named A. B. Hammond. It was owned and operated by Anaconda Mining and Anaconda Forest Products from about 1895 until 1972, when it was purchased by Champion Lumber Company. Stimson purchased it from Champion in 1993. See Exhibit A. The successor to Anaconda Forest Products is ARCO. The successor to Champion is International Paper.

As depicted in the photos included in the EE/CA, the cooling pond was an enclosure for log storage by 1905. As set forth at pages 3-4 of the EE/CA, it was altered and modified over time. However, by 1978, 15 years before Stimson's purchase, the pond had been

RECEIVED

OCT 10 2008

Department of
Environmental Quality
Remediation Division

reconstructed with earthen fill in a manner "similar to the current configuration." Stimson simply used the pond in the manner and configuration that it purchased it in 1993.

Sampling performed for DEQ by Olympus noted that sediments and soils in the cooling pond contain PCBs at concentrations ranging from non-detect to approximately 50 ppm. (There were also detections above screening levels of aromatic hydrocarbons, aliphatic hydrocarbons, and manganese, all in sediment within the then-current pond boundary, but the removal of PCBs would also result in the removal of these components).

Electrical and hydraulic oils contained PCBs from the 1930s into the 1970s. PCB production was terminated in 1977, but they had been removed from hydraulic oils in 1973. Therefore the PCBs in the cooling pond could have come from sources long since removed from the site.

As illustrated on Figure 30 of the EE/CA, the concentrations of PCBs that exceed 1 ppm are all located near the center of the pond area, and not at the western end of the pond, which is the location of the inlet for water runoff into the pond. Because PCBs tend to sorb to soils, this suggests, that the source of the PCBs was more likely located near the center of the pond, rather than being included in runoff from the remainder of the site. As demonstrated in Figures 5 to 8 of the EE/CA, and in Exhibit A, an old sawmill or stud mill operation was located on the south central bank of the cooling pond until it was shut down by Champion soon after it purchased the facility in 1972. That operation and the associated buildings were long gone when Stimson purchased the facility. As part of its ongoing environmental site assessment, Stimson will be trying to learn more about this mill and any other potential source.

The Remediation Cleanup Standard

It is telling that DEQ selected the EE/CA process for investigating options at the cooling pond. EPA guidance holds that an EE/CA is the correct vehicle for evaluating a non-time critical removal action, as opposed to a remediation of hazardous waste. See Exhibit B. When it is pre-determined that removal is an appropriate remedy, the EE/CA process is used to evaluate the scope of the removal. The EE/CA is a streamlined version of the remedial investigation/feasibility study (RI/FS) process that is used to more broadly evaluate multiple remedial alternatives in a more standard remediation context. If removal has been pre-selected, then the evaluation of other remediation alternatives can be skipped. Thus, in this instance, DEQ preordained sediment and soil removal without conducting a full-blown investigation including a risk assessment.

Olympus suggested in the EE/CA that all soils be removed that contain concentrations of PCBs above the EPA Region IX (California) preliminary remediation goal (PRG) for residential soils. This screening criterion is not applicable to a removal action EE/CA. EPA guidance states that PRGs are screening levels and are not to be used as defacto cleanup standards (see Exhibit C and D). Yet, an EE/CA, by design, is a streamlined process

that relies on defacto or off-the-shelf cleanup standards, rather than site-specific criteria. Cleanup standards are typically developed through the RI/FS process by applying site specific risk-based criteria. Because no RI/FS is intended for this site, the proper methodology is to look at other off-the-shelf clean-up standards to select removal criteria. The acceptable yet still ultraconservative standard is the TSCA residential standard of 1 ppm for PCBs. If all soil with PCB concentrations in excess of 1 ppm are removed from the cooling pond, all standards arguably applicable to a non-time critical soil removal action will have been met.

Attached hereto as Exhibit E is a proposal from Envirocon to do just that – remove all soils and sediments containing greater than 1 ppm PCBs. The proposal contemplates that the material would be removed to an on-site location to be capped and institutionally controlled as a low-occupancy area.

Stimson appreciates DEQ's willingness to handle the cooling pond sediments and soils through the relatively streamlined EE/CA process, but hereby respectfully requests that a more appropriate clean-up standard of 1 ppm PCBs be used and not the Region IX residential screening level of 0.22 ppm, which is not the applicable standard for this removal action and was never intended to be used as a defacto cleanup standard.

If you have any questions about these comments or Stimson's proposal, please do not hesitate to call me, or Jeff Webber of Stimson Lumber Company (503.222.1676).

Respectfully submitted,

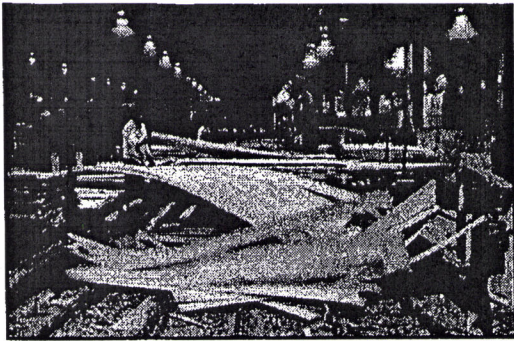


Max M. Miller, Jr.
Of Counsel for Stimson Lumber Company

M-M/jmf
Enclosures

000778\00342\1210898 V003

EXHIBIT A



Stimson will lay off 120 more workers Monday at its plywood mill; It's just the latest chapter in the long and winding story of American lumber

Dust made soft halos under the rows of high lights in the vast upper darkness of the 12-acre plywood plant at Stimson Lumber Co. in Bonner.

"This is the only lathe left. There used to be four of them puppies," said plant manager Bill Cady. He almost had to shout to be heard over the din of saws, chains, air hoses, forklifts and other operating equipment.

On Monday, the plywood mill will lose 120 jobs. The layoff will mark the end of commodity plywood production at a plant that once produced 300 million board feet of plywood every year, more than any other facility under one roof in the world.

About 330 workers will remain at the plant, milling studs and producing premium plywood panels, including sanded panels and Duratemp siding.

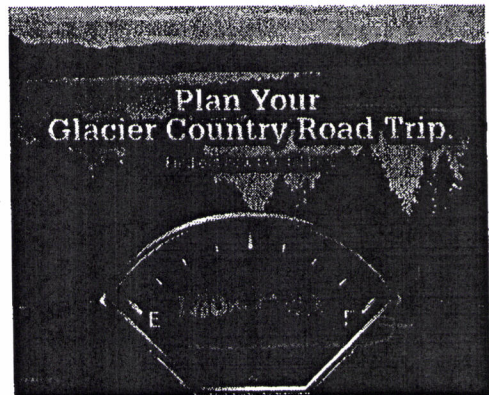
Near the lathe, the air was pungent with the rich smell of fresh-cut logs.

Pliable strips fell with numbing regularity onto the "green chain," a pair of conveyors. Along the chains, millworkers look at each piece, pulling the good ones into stacks. The torn or otherwise useless pieces go into another machine to be munched into wood chips.

"If you're on there, you work your butt off," Cady said.

The layoff at the plant is only the latest twist in a story that is as old as the mill itself. The plant has specialized in a huge range of products over the decades. The mill embraces a new one when the profit margins are good and works it until the margins disappear.

Economists call the process "creative destruction," because creativity constantly generates new products and destroys the markets for older ones.



A mill at Bonner

In about 1880, a wildcat of a man named A.B. Hammond built a mill near Clinton along the Clark Fork River to saw timbers into railroad ties.

In 1886, Hammond moved his sawmill to a triangular plain between the Blackfoot River and a steep mountainside rising to the east.

The river carried logs to the mill, which produced bridge timbers, more railroad ties and other products, including flour, said Glenn Smith, who retired a few months ago after working for 45 years at the Bonner mill.

Smith has a love for history. For years he wrote historical columns and stories for the mill's newsletter. He was raised in Bonner and knew old folks who had been there since the early days.

"I loved those guys. Hell, they were my friends. I patterned myself after them," he said.

Among Smith's albums of papers and photographs is the tidy signature of Marcus Daly in the guest log for the Hotel Margaret on Aug. 16, 1898.

Daly may have stayed at the beautiful steam-heated hotel on the mill grounds to look over his new investment. In 1895, the Anaconda Mining Co. started buying up Hammond's property in Bonner, including the lumber mill, the flour mill and the hotel.

Daly bought the lumber mill, as well as hundreds of thousands of acres of timberland, to gain control over the production of heavy mining timbers and ladders and other products needed by his industrial holdings, Smith said.

Over the years, Anaconda Forest Products also manufactured wooden boxes, moldings for doors and windows and even insulated and wired home kits. The walls, floors, ceiling and roof could all be assembled by number.

"You could put them together like a big puzzle," Smith said.

In 1972, the Anaconda Co. sold the mill to Champion Lumber Co., a corporation intent on capitalizing on the booming market for plywood. Champion owned the mill for 21 years, until 1993.

An awesome heyday

In August 1972, the top brass at Champion transferred a Georgia mill manager named Tom Breum to Montana.

That spring and summer, Champion shut down the factories that made Anaconda's various products, including the old stud mill that made mine timbers.

A team of engineers and consultants was in the process of designing a huge plywood plant, almost twice as big as the next largest competitor in the United States.

"What that mill would produce, it was awesome. It was awesome," Breum said. He retired in 1993 and remained in Missoula.

Four lathes, five dryers, four hot presses, two saw lines, sanders and other equipment filled the 12-acre building. At the far southwest end of the structure was a big door where 15 railcars could be loaded. The plywood was standard sheathing used to make floors, walls and other surfaces in houses.

The plywood plant operated without pause, day and night, five days a week. Several shifts continued over the weekend, depending on the order sheet, Breum said.

"We would run around the clock, full tilt," he said. The plywood plant alone employed about 550 people. In all, the mill had about 1,000 employees.

When the U.S. dollar weakened, the mill kept its volume high by exporting plywood to Germany, Japan, Finland, Denmark, Great Britain and the Netherlands.

Railcars went east and south to Biloxi, Miss., and Mobile, Ala., where it was loaded onto freighters.

"Three weeks after the mill and it was in a foreign port," Breum said.

The plywood story

Plywood itself is an ancient product. Wood panels glued together have been found in Egyptian tombs. It was also produced in small quantities in northern Europe. But the birth of modern plywood took place in Oregon in 1905.

Plywood became a viable building material when the Tacoma, Wash.-based APA - the Engineered Wood Association (formerly the American Plywood Association) formed in 1933.

The nonprofit trade association standardized plywood, turning a range of products into a commodity.

Over the decades, as in every industry, innovation constantly improved and streamlined production of plywood in the United States. One mill would mechanize one aspect of its production and cut its cost. Others would follow, or close down.

As a result, commodity plywood - the sheathing to make floors, walls and roofs - has the lowest profit margin for producers, said Craig Adair, director of market research at APA.

Imported plywood and a lower-cost alternate sheathing product called oriented strand board have made the market incredibly competitive for domestic producers.

Profit margins for specialty plywood products are slightly better. One such product is the Duratemp siding made at Bonner. The mill makes about 90 million square feet a year.

"It's the best siding panel on the market, and it's unique to this mill. That's the product we're laying our future on," said mill manager Cady.

Innovation

and quality control

Most of Smith's stories about new equipment at the Bonner mill end like this: "The problem was, you loaded it up, and it fell on its face."

Smith was talking about a nimble forklift-type machine that could efficiently load boxcars. But not if the load was too heavy. The employees had an idea to add concrete as ballast for the machine. But the concrete made the machine too heavy to move.

The recollection made Smith laugh. He has a rich laugh and loves to use it.

Over the decades at the mill, Smith saw innovations replace men, horses and beautiful old machinery. He's partial to the old, steam-operated stuff. The whole place was once run by steam, and steam heated all the company-owned homes in Bonner.

Much of the innovation came from employees at the mill. Some of the improvements involved logistics. How can sheets of plywood core get from one conveyor chain to another?

Other improvements came after requests from salesmen. When customers wanted odd-length plywood, workers designed a solution.

"Our guys have never been the constraint. We don't just do it out now and then. We always figure it out. Always," Cady said.

Plywood in its simplest form requires a complicated process. The Bonner mill takes the manufacturing process to an art form. Quality is the plant's edge.

After all the lathing, sorting, pressing, gluing, drying, heating, assembling, trimming and stacking, the plywood gets stacked on pallets and painted and stamped with the Stimson and APA trademarks.

"Look at this panel. Isn't it beautiful? You show me one gap in the core. I couldn't be more proud of that," Cady said.

Destruction

Innovation leads to destruction.

"I feel like I'm on parole," said John Skelton, who is among the workers who to be laid off Monday.

When the layoffs were announced, his wife cried. He had knots in his stomach.

Since then, he has gained some hope. For one thing, he has risen from No. 26 to about No. 10 on the recall list.

Since the layoffs were announced, a number of longtime employees have retired, making room for those laid off to return. Two employees also died in an automobile accident away from the mill. Another millworker died of a heart attack, Cady said.

Also, U.S. Sen. Max Baucus, D-Mont., announced Thursday that displaced workers from the plywood mill at Bonner would be eligible for 24 months of retraining, job search and unemployment assistance.

But that still doesn't answer the long-term questions for Skelton, his wife Chris and their two teenage boys. The family lives across U.S. Highway 200 from the mill in the row of mill-owned homes. Company officials said the family can stay as long as the rent is paid. Skelton also worries about losing health benefits.

"I'm holding my breath, seeing what happens," Skelton said.

Reporter Robert Struckman can be reached at 523-5262 or at rstruckman@missoulian.com

Name:

Email:

Comments:

Current Word Count:

EXHIBIT B

United States
Environmental Protection
Agency

Office of
Solid Waste and
Emergency Response

Publication: 9360.0-32FS
EPA/540/F-94/009
PB93-963422
December 1993



Conducting Non-Time-Critical Removal Actions Under CERCLA

Office of Emergency and Remedial Response
Hazardous Site Control Division, 5202 G

Quick Reference Fact Sheet

This fact sheet summarizes a document entitled "Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA" (OSWER Directive 9360.0-32). The guidance describes the essential components of the non-time-critical removal action process with particular emphasis placed on conducting the Engineering Evaluation/Cost Analysis (EE/CA). This document also provides general guidance on other activities carried out during a non-time-critical removal action, such as enforcement, public involvement, and Action Memorandum preparation. The guidance is to be used in conjunction with EPA's Emergency Response Division (ERD) Superfund Removal Procedures (SRP) manual which provides detailed guidance for carrying out various activities at all types of removal sites.

INTRODUCTION

Non-time-critical removal actions are conducted at Superfund sites when the lead Agency determines, based on the site evaluation, that a removal action is appropriate, and a planning period of at least six months is available before on-site activities must begin. Because non-time-critical removal actions can address priority risks, they provide an important method of moving sites more quickly through the Superfund process. Thus, conducting non-time-critical removal actions advances the goals of the Superfund Accelerated Cleanup Model (SACM) to include substantial, prioritized risk reduction in shorter time frames and to communicate program accomplishments to the public more effectively.

RESPONSIBILITIES AND RESOURCES

Most non-time-critical removal actions are led by EPA, unless the State, potentially responsible party (PRP), Federal agency, political subdivision, or Indian Tribe has the financial and technical ability to lead the response. Regardless of who takes the lead, the EPA On-Scene Coordinator (OSC) or Remedial Project Manager (RPM) is responsible for arranging for technical assistance from other agencies, if the OSC/RPM determines such assistance is needed. For non-time-critical removal actions, the OSC/RPM directs or reviews the work of other agencies, PRPs, and contractors to ensure compliance with

CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The OSC/RPM also reviews all decision documents, enforcement orders, and work plans; oversees all expenditures of EPA funds; and ensures all staff working on the site know operating and safety procedures.

EPA should not conduct Fund-financed removal actions when the response is within the independent financial and technical capabilities of a State, PRP, Federal agency, political subdivision, or Indian Tribe. To lead a non-time-critical removal action, a State, political subdivision, or Indian Tribe must first apply for a removal Cooperative Agreement (CA) pursuant to 40 CFR Subpart O, section 35.6200. When EPA retains the lead for non-time-critical removal actions without financial participation from a State, political subdivision, or Indian Tribe, the Regional Decision Team (RDT) should assess the urgency of the situation and determine whether the removal action should proceed without such participation.

The RDT ensures effective coordination, communication, and integration of Superfund program authority, expertise, resources, and tools. Although RDT involvement in removal assessments and decision-making may vary from Region to Region, for non-time-critical removal actions the RDT should help assess the opportunity for response and help initiate the preparation of the EE/CA Approval Memorandum, the EE/CA, and the Action Memorandum.

Because at least a 6-month planning period is available for non-time-critical removal actions, there is time to obtain commitment from a State or local government or PRP to perform and fund necessary post-removal site control (PRSC) activities prior to initiating the response. If the OSC/RPM is unable to secure such an agreement, removal options that involve continuing PRSC should be avoided where other options are feasible.

Technical assistance resources available to the lead Agency in carrying out a non-time-critical removal action include: national, Regional, and specialized response teams; contractors; other Federal agencies; and State and local governments. The Long-Term Contracting Strategy (OSWER Publication 9242.6-07) provides a road map to Superfund contract support and gives Regions full responsibility for contracts management.

ENFORCEMENT ACTIVITIES

A PRP search should begin as soon as a removal action appears likely. If enforcement will be pursued for a non-time-critical removal site, a CERCLA section 122(e) special notice letter should be used to solicit a written good faith offer from the PRP, which demonstrates the PRP's qualifications and willingness to conduct or finance the removal action. Issuance of a special notice triggers a 60- to 120-day moratorium on EPA conducting the removal action (although additional studies or investigations authorized under CERCLA section 104(b), including the EE/CA, may be initiated).

During the moratorium, the OSC/RPM should consult with Regional staff in developing an Administrative Order on Consent (AOC), which is a legally enforceable agreement signed by EPA and the PRP whereby the PRP agrees to perform or pay the cost of site cleanup, and may forfeit the right to make a claim against the Fund. An AOC outlines the activities the PRP must undertake and the completion dates for those activities. The State should always be notified prior to negotiating or issuing an AOC.

If the OSC/RPM wishes to pursue informal negotiations without using a CERCLA section 122(e) special notice letter, CERCLA section 122(a) requires EPA to issue a notice letter to the PRP explaining why special notice procedures will not be used. In cases where no negotiation is desirable, the OSC/RPM can use the notice letter supply to inform the PRP of their potential liability and provide notice that the Agency has taken or plans to take a response action.

The statute of limitations for cost recovery for removal actions is 3 years from the completion of the removal action, unless a consistency exemption to the statutory limits under CERCLA section 104(c)(1)(C) has been approved (in which case the statute of limitations is 6 years from the date of the last exemption). A decision not to pursue cost recovery must be documented in a Removal Action Cost Recovery Close-Out Memorandum prepared in consultation with the Office of Regional Counsel.

PUBLIC INVOLVEMENT

Sections 300.415(m) and 300.820 of the NCP specify community relations and administrative record activities as two forms of public participation necessary for all removal actions. The OSC/RPM is responsible for ensuring that these requirements are met.

Community relations requirements during removal actions are intended to promote active communication between communities affected by a release or a threat of release (including the PRP) and the lead agency. The following community relations activities are required for non-time-critical removal actions:

- Designate a community relations spokesperson
- Establish the information repository
- Conduct community interviews
- Prepare Community Relations Plan (CRP)
- Issue public notice of availability of the EE/CA.

The administrative record file, a subset of the site file, is the body of documents used by the Agency during a removal action to select a response. It includes site specific data and documents that reflect the views of the public, including PRPs, concerning this selection. For non-time-critical removal actions, the EE/CA Approval Memorandum and EE/CA are the critical components of the administrative record file. The required administrative record requirements for non-time-critical removal actions are as follows:

- Establish the administrative record file
- Publish public notice of the availability of the administrative record file
- Hold a public comment period
- Develop written responses to significant public comments
- Complete the administrative record file after selecting the response.



CONDUCTING THE EE/CA

Section 300.415(b)(4)(i) of the NCP requires an EE/CA for all non-time-critical removal actions. It is intended to: (1) satisfy environmental review requirements for removal actions; (2) satisfy administrative record requirements for unproved documentation of removal action selection; and (3) provide a framework for evaluating and selecting alternative technologies. In doing so, the EE/CA identifies the objectives of the removal action and analyzes the effectiveness, implementability, and cost of various alternatives that may satisfy these objectives. Thus, an EE/CA serves an analogous function to, but is more streamlined than, the remedial investigation/feasibility study (RI/FS) conducted for remedial actions. The results of the EE/CA and EPA's response decision are summarized in the Action Memorandum.

The EE/CA Approval Memorandum, which is prepared once the need for a non-time-critical removal action has been determined, serves three important functions. First, it secures management and funding approval to conduct the EE/CA. If the action is PRP-lead, provision for oversight funding will be contained in an Administrative Order and should be included in the EE/CA Approval Memorandum. Second, it documents that the situation meets the NCP criteria for initiating a non-time-critical removal action. Third, it provides a finding of an actual or threatened release from the site and, if present, a finding of an imminent and substantial endangerment, or refers to a document establishing such a determination. The EE/CA Approval Memorandum also provides general information pertaining to the site background; threats to public health, welfare, or the environment posed by the site (including expected changes in the site situation if no action is taken or if the action is delayed); enforcement activities related to the site; and estimated EE/CA costs.

The Regional Administrator (or authorized designee) evaluates the EE/CA Approval Memorandum and provides authorization. Funds expended in preparing the EE/CA Approval Memorandum are considered CERCLA section 104(b)(1) monies and are not counted toward the \$2 million statutory limit for removal actions. The EE/CA Approval Memorandum contains the following sections:

- Subject
- Background
- Threat to public health, welfare, or the environment (including expected change if no action is taken or if action is delayed)
- Imminent and substantial endangerment, if present

- Enforcement actions
- Proposed project/over sight and cost
- Approval/disapproval.

Once the EE/CA Approval Memorandum is authorized, preparation of the EE/CA can begin. The EE/CA includes the following sections:

- Executive summary
- Site characterization
 - S Site description and background
 - S Previous removal actions
 - S Source, nature, and extent of contamination
 - S Analytical data
 - S Streamlined risk evaluation
- Identification of removal action objectives
 - S Statutory limits on removal actions
 - S Determination of removal scope
 - S Determination of removal schedule
 - S Planned remedial activities
- Identification and analysis of removal action alternatives
 - S Effectiveness
 - S Implementability
 - S Cost
- Comparative analysis of removal action alternatives
- Recommended removal action alternative.

The EE/CA executive summary provides a general overview of the contents of the EE/CA. The executive summary is intended to make the EE/CA simpler for the public to review. It can be used in the Action Memorandum to describe the EE/CA.

The site characterization section should summarize available data on the physical, demographic, and other characteristics of the site and surrounding areas to provide background engineering information for analyzing removal alternatives. Data on the site may be available from a removal site evaluation or from other EPA documents regarding the site. Source documents should be placed in the administrative record for the site. EPA should coordinate activities of the OSC/RPM with those of the site assessment manager, risk assessor, and enforcement/legal staff to ensure appropriate data are collected to characterize the site.

Identifying the removal action scope, goals, and objectives involves considering the \$2 million and 12-month statutory limits for Fund-financed removal actions. If there is a need for an exemption from these limits, the details should be described in the EE/CA as well as in the Action Memorandum requesting the exemption. This

section should also identify specific objectives that clearly define the scope of the removal action (e.g., total site cleanup, site stabilization, or surface cleanup of hazardous substances). EE/CAs for removal actions at non-NPL sites should consider the potential for future NPL listing to ensure the goals of the removal action are consistent with any potential long-term remediation. When a non-time-critical removal action will be the only or last action taken to clean up a potential NPL site, the EE/CA should provide adequate documentation that activities performed at the site are sufficient to meet completion requirements. In addition, this section should provide a general schedule of removal activities, including both the start and completion time for the non-time-critical removal action. This schedule can be an important factor in evaluating removal action alternatives based on their implementation times.

Once the removal action scope, goals, and objectives have been identified, a few relevant and viable removal alternatives should be chosen for evaluation and comparison. Removal alternatives should be analyzed for their effectiveness, implementability, and cost. Effectiveness can be evaluated in terms of protectiveness and ability to achieve removal objectives. The protectiveness of the alternatives can be assessed in terms of how well they protect public health and the community, protect workers during implementation, protect the environment, and comply

with applicable or relevant and appropriate requirements (ARARs). The implementability of the alternatives depends on their technical feasibility, the availability of necessary resources to support the alternatives, and their administrative feasibility. The cost of the alternatives is determined by looking at capital costs, costs for PRSC, and present worth cost.

Once the alternatives have been described and individually assessed against the criteria, a comparative analysis should be conducted to evaluate the relative performance of each alternative in relation to each of the criteria. This process should identify key trade-offs that would affect the remedy selection. Based on this analysis, the EE/CA should determine the recommended action and describe the reasons for the recommendation. This determination can be summarized in fact sheet form and placed in the administrative record file.

NOTICE: The policies set out in this fact sheet are not final agency action, but are intended solely as guidance. They are not intended, nor can they be relied upon, to create any rights enforceable by any party in litigation with the United States. EPA officials may decide to follow the guidance provided in this fact sheet, or to act at variance with the guidance, based on an analysis of site-specific circumstances. The Agency also reserves the right to change this guidance at any time without public notice.



United States
Environmental Protection
Agency (5202 G)
Washington, DC 20460

Official Business
Penalty for Private Use
\$300

EXHIBIT C

Mid-Atlantic Risk Assessment

You are here: [EPA Home](#) [Mid-Atlantic Risk Assessment](#) Risk-Based Concentration Table**User's Guide
Disclaimer****Table of Contents**

- User's Guide
- What's New
- FAQ
- Equations
- Calculator
- Generic Tables

This guidance sets forth a recommended, but not mandatory, approach based upon currently available information with respect to risk assessment for response actions at CERCLA sites. This document does not establish binding rules. Alternative approaches for risk assessment may be found to be more appropriate at specific sites (e.g., where site circumstances do not match the underlying assumptions, conditions and models of the guidance). The decision whether to use an alternative approach and a description of any such approach should be documented for such sites. Accordingly, when comments are received at individual CERCLA sites questioning the use of the approaches recommended in this guidance, the comments should be considered and an explanation provided for the selected approach.

It should also be noted that the screening levels (SLs) in these tables are based upon human health risk and do not address potential ecological risk. Some sites in sensitive ecological settings may also need to be evaluated for potential ecological risk. EPA's guidance "Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessment" <http://www.epa.gov/oswer/riskassessment/ecorisk/ecorisk.htm> contains an eight step process for using benchmarks for ecological effects in the remedy selection process.

1. Introduction

The purpose of this website is to provide default screening tables and a calculator to assist Remedial Project Managers (RPMs), On Scene Coordinators (OSCs), risk assessors and others involved in decision-making concerning CERCLA hazardous waste sites and to determine whether levels of contamination found at the site may warrant further investigation or site cleanup, or whether no further investigation or action may be required.

Users within and outside the CERCLA program should use the tables or calculator results at their own discretion and they should take care to understand the assumptions incorporated in these results and to apply the SLs appropriately.

The SLs presented in the Generic Tables are chemical-specific concentrations for individual contaminants in air, drinking water and soil that may warrant further investigation or site cleanup. The SLs generated from the calculator may be site-specific concentrations for individual chemicals in soil, air, water and fish. **It should be emphasized that SLs are not cleanup standards.** SLs should not be used as cleanup levels for a CERCLA site until the other remedy selections identified in the relevant portions of the National Contingency Plan (NCP), 40 CFR Part 300, have been evaluated and considered. PRGs is a term used to describe a project team's early and evolving identification of possible remedial goals. PRGs may be initially identified early in the Remedial Investigation/ Feasibility Study (RI/FS) process (e.g., at RI scoping) to select appropriate detection limits for RI sampling. Typically, it is necessary for PRGs to be more generic early in the process and to become more refined and site-specific as data collection and assessment progress. The SLs identified on this website are likely to serve as PRGs early in the process--e.g., at RI scoping and at screening of chemicals of potential concern (COPCs) for the baseline risk assessment. However, once the baseline risk assessment has been performed, PRGs can be derived from the calculator using site-specific risks, and the SLs in the Generic Tables are less likely to apply. PRGs developed in the FS will usually be based on site-specific risks and Applicable or Relevant and Appropriate Requirements (ARARs) and not on generic SLs.

2. Understanding the Screening Tables**2.1 General Considerations**

Risk-based SLs are derived from equations combining exposure assumptions with chemical-specific toxicity values.

2.2 Exposure Assumptions

Generic SLs are based on default exposure parameters and factors that represent Reasonable Maximum Exposure (RME) conditions for long-term/chronic exposures and are based on the methods outlined in EPA's *Risk Assessment Guidance for Superfund, Part B Manual (1991)* and Soil Screening Guidance documents (1996 and 2002).

Site-specific information may warrant modifying the default parameters in the equations and calculating site-specific SLs, which may differ from the values in these tables. In completing such calculations, the user should answer some fundamental questions about the site. For example, information is needed on the contaminants detected at the site, the land use, impacted media and the likely pathways for human exposure.

Whether these generic SLs or site-specific screening levels are used, it is important to clearly demonstrate the equations and exposure parameters used in deriving SLs at a site. A discussion of the assumptions used in the SL calculations should be included in the documentation for a CERCLA site.

2.3 Toxicity Values

In 2003, EPA's Superfund program revised its hierarchy of human health toxicity values, providing three tiers of toxicity values (<http://www.epa.gov/oswer/riskassessment/pdf/hhmemo.pdf>). Three tier 3 sources were identified in that guidance, but it was acknowledged that additional tier 3 sources may exist. The 2003 guidance did not attempt to rank or put the identified tier 3 sources into a hierarchy of their own. However, when developing the screening tables and calculator presented on this website, EPA needed to establish a hierarchy among the tier 3 sources. The toxicity values used as "defaults" in these tables and calculator are consistent with the 2003 guidance. Toxicity values from the following sources in the order in which they are presented below are used as the defaults in these tables and calculator.

1. EPA's Integrated Risk Information System (IRIS)
2. The Provisional Peer Reviewed Toxicity Values (PPRTVs) derived by EPA's Superfund Health Risk Technical Support Center (STSC) for the EPA Superfund program. (Note that the PPRTV website is not open to users outside of EPA, but assessments can be obtained for use on Superfund sites by contacting Dave Crawford at Crawford.Dave@epa.gov).
3. The Agency for Toxic Substances and Disease Registry (ATSDR) minimal risk levels (MRLs)

EXHIBIT D**1. What are SLs?**

The screening levels (SLs) presented on this site are for the Superfund/RCRA programs. They are risk-based concentrations derived from standardized equations combining exposure information assumptions with EPA toxicity data. SLs are considered by the Agency to be protective for humans (including sensitive groups) over a lifetime; however, SLs are not always applicable to a particular site and do not address non-human health endpoints, such as ecological impacts. The SLs contained in the SL table are generic; they are calculated without site-specific information. They may be re-calculated using site-specific data.

2. Why are SLs used?

They are used for site "screening" and as initial cleanup goals, if applicable. SLs are not de facto cleanup standards and should not be applied as such. The SL's role in site "screening" is to help identify areas, contaminants, and conditions that require further federal attention at a particular site. Generally, at sites where contaminant concentrations fall below SLs, no further action or study is warranted under the Superfund program, so long as the exposure assumptions at a site match those taken into account by the SL calculations. Chemical concentrations above the SL would not automatically designate a site as "dirty" or trigger a response action; however, exceeding a SL suggests that further evaluation of the potential risks by site contaminants is appropriate. SLs are also useful tools for identifying initial cleanup goals at a site. In this role, SLs provide long-term targets to use during the analysis of different remedial alternatives. By developing SLs early in the decision-making process, design staff may be able to streamline the consideration of remedial alternatives.

3. How do SLs differ from cleanup standards?

SLs are generic screening values, not de facto cleanup standards. Once the Baseline Risk Assessment is completed, site-specific risk-based remediation goals can be derived using the BLRA results. The selection of final cleanup goals may also include ARARs and TBCs, as well as site-specific risk-based goals. In the Superfund program, this evaluation is carried out as part of the nine criteria for remedy selection outlined in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Once the nine-criteria analysis is completed, the SL may be retained as is or modified (based on site-specific information) prior to becoming established as a cleanup standard. This site-specific cleanup level is then documented in the Record of Decision.

4. How often do you update the SL Table?

It is anticipated that the SLs will be updated approximately semiannually. However, the beta release version may initially be updated sooner, to correct any errors or accommodate significant user feedback. Please take note of the "What's New" page to identify when toxicity values are updated.

MEMORANDUM

TO: Jeff Webber, VP Manufacturing

FROM: Al Brule'

DATE: October 1, 2008

SUBJECT: Cost and Technical Evaluations for the Remediation of the Stimson Lumber Company Cooling Pond Project, Missoula County, Montana

1. Introduction

At the request of Stimson Lumber, Envirocon has prepared both a cost estimate and a technical response for remediation of the cooling pond at the former Bonner Lumber Mill in Bonner, Montana. The proposal described in this document includes an evaluation and recommendations for removal of the PCB-contaminated sediments as well as the stabilization of the existing embankment along the Blackfoot River.

2.0 Environmental Issues

This memo summarizes our assessment of the Engineering Evaluation/Cost Analysis (EE/CA) prepared on behalf of Montana DEQ by Olympus Technical Services, Inc. for the Stimson Cooling Pond. This assessment is limited to the regulatory jurisdiction, environmental assessment, cleanup levels, and possible cleanup alternatives. The matters of slope stability and cost estimates for various remedial alternatives are being addressed by others.

2.1 Environmental Assessment

The EE/CA does a good job of characterizing the site in that it narrows the chemicals of concern (COCs) to petroleum and PCBs and presents enough sampling data to estimate the quantity of impacted materials. The soil data presented probably is sufficient to both plan and execute a removal of certain impacted materials, although additional post-removal sampling would almost certainly be required. The detection limits of all samples analyzed appear to be low enough for comparison with a range of possible cleanup levels. It should be noted that only PCB- Aroclor 1254 was found in any of the soil, sediment, or groundwater samples.

The EE/CA included the collection of soil and sediment samples from in and around the pond. There is a possibility that data gaps exist in soil data along the south side of the pond which is outside of the area of current pond sediment at the time the soil samples were collected. Much of this area was covered by logs and was inaccessible. However, given that nearly all of the material exceeding 1 ppm of PCBs is contained within the current pond sediment, it is unlikely that

additional sampling on the south side of the pond would lead to an expansion of the volume of material containing >1 ppm PCBs.

The assessment of groundwater is not complete, as it included only the sampling of two wells installed during the EE/CA on the north and west sides of the cooling pond. Furthermore, the groundwater samples were collected using bailers, which typically (especially after a well is first installed) produce samples with large amounts of sediment. Nevertheless, the sample from one of the wells (MW-3) contained PCBs at 0.81 and 1.7 ppb. The sample from MW-1 contained no detectable PCBs. This assessment should be considered a worst-case characterization due to the sampling methods used.

As requested by Stimson September 25 through 26, Douglass, Inc. resampled the two wells sampled during the EE/CA as well as two wells installed previously by Stimson (MW-4 and MW-6). All four wells were sampled using a low-flow pneumatic bladder pump with disposable bladders. Wells MW-1, MW-4, and MW-6 produced very clear samples using this method. However, MW-3 produced extremely turbid water, bordering on mud, until it had been pumped dry several times over a period of 2 hours. After allowing the well to refill overnight, low-flow sampling successfully obtained a clear sample for analysis. The results of the analyses (included in this report) of these samples was received on 10/2/08. None of these samples contained any PCBs above the detection limit of 0.5 ug/L (ppb). It should be noted that, under normal circumstances, MW-3 did not contain enough water to sample, even using low-flow methods. However, since an exceedance of the cleanup level for PCBs was reported from this well in the EE/CA, an unusual effort was made to obtain a clear sample from this well.

Clarity of groundwater samples is important because PCBs, like many heavier hydrocarbons, is extremely insoluble in water. PCBs much prefer to sorb to sediment particles, particularly organic particles like the sediment found in MW-3. By obtaining a clean groundwater sample, the true groundwater concentration can be determined. The results of these groundwater samples from the four wells around the cooling pond are evidence that PCBs in the pond sediments are not leaching to groundwater.

2.2 PCB Cleanup Levels

Cleanup levels for the site will be an important determining factor in selecting the appropriate remedy including the amount of soil/sediment to be removed and the disposition of the material. Possible cleanup levels include those listed in the federal TSCA regulations (40 CFR 761.61 (a)(4)), Montana regulations, or levels selected based on a site-specific risk assessment.

TSCA mandates cleanup levels for PCBs as follows:

- For “high-occupancy” areas, the cleanup level is 1 ppm without further conditions. Soil containing up to (but not including) 10 ppm PCBs can be left in “high-occupancy” areas if it is covered with a cap.
- For “low-occupancy” areas, the cleanup level is 25 ppm without further condition. Soil containing up to (but not including) 50 ppm can be left in “low-occupancy” areas if the area is fenced and posted with appropriate signs. Soil containing up to (but not including) 100 ppm PCBs can be left in “low-occupancy” areas if it is capped as required in the TSCA regulations.

High-occupancy and low-occupancy areas are defined based on the number of hours per year that humans occupy the area without respiratory protection. High-occupancy areas are those that are occupied by any one individual for more than 6.7 hours per week; low-occupancy areas are those occupied by any one individual for less than 6.7 hours per week.

It bears noting that the existing pond could be established as a low-occupancy area and most of the soil/sediment could be left in place. However, based on the proximity to the river and alleged vulnerability of the pond berm, it is unlikely that DEQ would accept this approach.

As stated in the EE/CA (page iii) the EPA Region IX Preliminary Remediation Goals (PRGs) recently updated (June 20, 2008) are screening levels that do not mandate action, but instead warrant further consideration. PRGs are developed using conservative assumptions so that they can be used at most sites as screening levels to determine if further analysis for cleanup might be required. The PRG table lists PRGs for residential and industrial soil (direct exposure), residential and industrial air, tap water, and leaching to groundwater. The EE/CA uses the residential direct exposure PRG for PCBs of 0.22 ppm but notes that the PRG is a screening concentration only. Although the EE/CA notes that this is a screening level, it nevertheless proposes to remove and dispose of all soils exceeding this level. As further discussed below, this screening concentration is not an appropriate cleanup level. The EE/CA does not directly mention the PRG for leaching of PCBs to groundwater. The PRG in soil for leaching of PCBs to groundwater is 0.0051 ppm, but since the groundwater sample results indicated that groundwater has not been impacted, the lower leaching PRG should not be an applicable screening criterion.

Montana has statutory cleanup levels for PCBs in groundwater, but does not have its own remediation goals for PCBs in soil. Typically, Montana DEQ would use the TSCA cleanup levels or a site-specific risk-based cleanup level for PCBs in soil. The groundwater cleanup level, which is statutory (Water Quality Circular DEQ-7, February 2008), is 0.5 ppb for groundwater. The groundwater sample collected from MW-3 during the EE/CA slightly exceeded the DEQ-7 cleanup level for groundwater. However, as described above, the earlier sample was collected using methods that often do not produce a clear and representative sample. The latest samples were collected using low-flow techniques which produced clear and more representative samples from all wells that contained no detectable PCBs.

One of the options for a cleanup under TSCA is a risk-based cleanup in which the cleanup levels are based on a site-specific risk assessment. TSCA is vague as to what is required for such a cleanup; presumably the details for both risk assessment and cleanup would be negotiated with EPA/DEQ. The cost of a site-specific risk assessment can be high (>\$50,000), but it is possible that a focused risk evaluation could be completed at a much lower cost.

2.3 Petroleum Cleanup Levels

Cleanup levels for petroleum at the site will likely be based on the Risk-Based Corrective Action (RBCA) guidance developed by Montana DEQ. This guidance lists cleanup levels for petroleum fractions and specific chemicals commonly found in petroleum products. The EE/CA correctly analyzed soil and groundwater samples using the Massachusetts methods for extractable petroleum hydrocarbons (EPH). The only constituents found that approached RBCA cleanup levels were C11-C22 Aromatics, C19-C36 Aliphatics, and C9-C18 Aliphatics. Of these, only five soil samples exceeded the RBCA cleanup level for C11-C22 Aromatics. All five samples were from sediment in the pond, and the concentrations only slightly exceeded the RBCA cleanup levels for leaching to groundwater and residential direct exposure pathways. Most importantly, however, is that these concentrations will probably not be relevant, as the PCB concentrations in those areas will likely drive the cleanup. In other words, cleanup that adequately addresses PCBs should also fully address concerns related to petroleum hydrocarbons. The relative absence of petroleum fractions throughout the site indicates that it will not be a major cleanup issue.

2.4 Cleanup Alternatives

Based on the above information and the data in the EE/CA, three various cleanup alternatives would be effective. First, it is assumed that some soil must be removed from the cooling pond. This assumption is based on the exceedance of TSCA cleanup levels, proximity to the Blackfoot River, and alleged vulnerability of the outer slope of the pond wall. As discussed above, a site-specific risk assessment may demonstrate otherwise, but the working assumption at this time is that the TSCA high-occupancy area cleanup level will apply.

Second, the amount of soil to be removed must be estimated based on the cleanup level accepted by DEQ. If the cleanup level of 1 ppm is used, a quantity of soil that must be removed would be approximately 25,000 cubic yards. The remaining soil with <1 ppm PCBs would be unregulated by TSCA. Since Montana DEQ isn't necessarily bound by the TSCA cleanup level, it will probably be necessary to get Montana DEQ concurrence with this approach before submitting a work plan for a self-implementing plan under TSCA.

Once the cleanup level has been determined, the disposition of the removed soil and sediment must be determined. Under TSCA it is clear that soil containing up to 100 ppm PCBs can be disposed on site in a low-occupancy area (and up to 10 ppm in a high-occupancy area). The area identified for disposal would probably need to be surveyed and deed restricted to prevent future high-occupancy uses. It would also

need to be capped and possibly fenced. This disposal alternative is probably the least costly, but maintenance of the area in perpetuity, potential loss in value of the land used for disposal, possible hindrance to sale of the land, and/or objections by DEQ/public may make this alternative less attractive.

The other alternative is off-site disposal at the Allied Waste solid-waste landfill in Missoula. According to TSCA, soil containing <50 ppm PCBs can be disposed at a solid-waste landfill.

3.0 Geotechnical/Slope Stability Issues

3.1 Introduction

This section presents preliminary findings and recommendations regarding the condition and potential upgrade requirements for the Stimson Lumber cooling pond embankment. The evaluation was done in support of development, by Envirocon for Stimson, of a proposal for remediation of PCB-impacted sediment in the cooling pond. As identified in the Draft Final Expanded Engineering Evaluation/Cost Analysis for the Stimson Lumber Company (MDEQ 2007) the state of Montana identified a preferred remediation alternative that involved dry excavation of the cooling pond sediment and berm with off-site disposal. However, it is our understanding that the Envirocon/Stimson proposal will look at an alternate approach that may include leaving the berm in place and upgrading it if necessary to provide long-term stability.

3.2 Purpose

The purpose of this evaluation was to do a cursory engineering analysis of the current condition and stability of the berm and to provide recommendations for what upgrades might need to be done to maintain longer term stability if the berm was to be kept in service.

3.3 Methodology

Due to time limitations, our evaluation on the berm's current condition was limited to review of existing reports, including reports providing the results of previous computer geotechnical modeling of the berm's stability under various loading, pond levels, and river levels. Determination of potential berm upgrade requirements to provide stability longer term was based on limited hydraulic modeling to predict water surface elevations and velocities during a design flood event (assumed to be the 100-year return event) along with a qualitative assessment of predicted geotechnical stability. Hydraulic modeling was done using the HEC-RAS computer program and channel geometry/flow input data developed for the Milltown Dam removal scour evaluation. Based on the results of these assessments, a preliminary berm upgrade design with quantities was developed to a sufficient level of detail for use in assessing the cost of leaving the berm in place versus removing it. It should be noted that the proposed upgrade design is based in part on estimated or assumed

data and if the decision is made to leave the berm in place additional data collection and evaluation will be required for a final upgrade design.

3.4 Conclusions

Based on review of available information and completion of limited additional evaluations the following conclusions were made:

- The cooling pond berm has a top width of approximately 20 feet and is approximately 30 feet high with a crest elevation (EL) of about 3,273 feet. It extends for approximately 630 feet between the Blackfoot River and the west and north sides of the cooling pond.
- Borehole logs and visual inspection show that the berm is primarily comprised of sand and gravel along with some organic-based fill. A rock filled timber crib wall makes up much of the riverside of the berm and appears to currently be intact and in relatively good condition. However, degradation of the organic-based fill and timber cribbing would be expected over time as these materials, which were previously submerged by the Milltown Dam reservoir pool, are exposed to aerobic conditions.
- As shown in Figure 1, the current elevation of the berm crest is predicted to provide approximately 7 to 8 feet of freeboard over the predicted water surface elevation (wse) in the Blackfoot River during a Stage 3 (i.e., post Milltown Dam removal) 100-year flow event of about 3,266 feet.
- As shown in Figure 2, the current top of existing riprap along the riverside of the berm is as much as about 8-feet below the predicted 100-year level. The size of the existing riprap is variable with the more recently placed material made up of MDT class III gradation (i.e., D100 of 2.82 feet) while older riprap was generally smaller. Preliminary analysis suggests that larger riprap, on the order of Type 2 riprap used at Milltown (i.e., D100 of 4 feet) or potentially larger, would be required for the 100-year event. Therefore both the height and size of the existing riprap may be inadequate for providing long-term erosion protection against the 100-year flood event.
- A berm geotechnical stability evaluation completed for USACE by Orion Engineering predicted a safety factor against failure of 1.24 for the current berm/pond configuration (which includes recent placement by EPA of riprap up to about EL 3258 feet on the riverside). This resulting safety factor is below industry standards of 1.3 to 1.5 even without considering the potential for future loss of strength due to degradation of the organic-based fill and timber materials within the berm.

3.5 Recommendations

To provide long-term erosion protection against the 100-year flood event additional large riprap should be placed to about EL 3268 feet along the riverside of the berm (see Figure 2). A geotextile filter may be required beneath the riprap. In addition to providing erosion protection, the additional riprap will function as a buttress improving the safety factor against slope failure. A quantitative analysis of the proposed configuration's safety factor against slope failure was not done, but given the riprap extends above expected cooling pond water levels and would be placed at a 2H:1V slope (which is significantly flatter than the friction angle of angular riprap could support) it should provide significant additional resisting force against slope failure likely bringing the safety factor above industry standards. If this alternative is ultimately selected, then a more detailed stability analysis should be completed to develop a final design. For cost comparison purposes, the need to place approximately 9,950 cy of additional large riprap (see attached calculation for quantity estimate backup) should be assumed if the berm is proposed to be left in place long-term. About 5,000 cy of this riprap could potentially be replaced with compacted fill overlain with a geotextile and approximately 4,950 cy of large riprap. It should also be noted that the additional riprap will extend into the channel which is already width constrained at this location which may be an issue for permitting.

4.0 Cost Estimate Assumptions

The cost estimate assumptions for this project are broken down into two major categories. One is a complete estimate for remediation of the cooling pond sediments with a second element covering the embankment stabilization work along the Blackfoot River.

The estimates shown by Olympus were based on a different set of assumptions and included contingency factors.

4.1 Primary Assumptions – Cooling Pond Remediation

- Additional soil characterization sampling, (100 each) to better quantify and bracket the soils requiring excavation and management.
- Only those sediments containing PCB concentrations greater than 1 ppm, will be excavated and stockpiled in the on site secure area, or approximately 28,800 cys.
- Minimal dewatering/basic water treatment costs included in this estimate. Assume much of the excavation will be performed in the wet with staggered stockpiles allowing for drainage as needed to transport to stockpile.
- Excavated materials can be stockpiled on one of the existing 4-acre concrete slabs.
- Assume beginning design work in fourth qtr of 2008 with a summer 09' startup for construction. See Figure 3.

- Influent can be diverted or shut off during construction.
- Estimate includes costs to provide a 10-mil fiber-reinforced cap material over the stockpiled sediments to minimize influence of precipitation. Over the plastic sheeting will be an assumed 18-inch layer of topsoil, seeded to minimize erosion.
- Installation of approximately 10 new monitoring wells (this is a conservative outside estimate).
- Installation of a 6-foot chain link fence around the perimeter of the sediment stockpile.
- Assume having to import approximately 8,500 cys of pit run material to restore some form of grade on the base of the cooling pond to facilitate drainage.
- Assume seeding with a standard grass or cover crop vegetation layer for approximately 8 acres (stockpile and cooling pond affected areas).
- Limited costs (maximum of 10%) for regulatory oversight, QA/QC and contingencies are included in this proposal.
- This scope assumes a 5-year O&M period for monitoring of the stockpile including limited groundwater sampling.

4.2 Primary Assumptions – Embankment

- Assume a total of approximately 4,000 cys of structural fill to create the uniform slopes followed by 6,000 cys of Type II Rip Rap armoring.
- Section also includes a 33,000 sf layer of filter fabric between the structural fill and the riprap.
- This proposal also includes limited salvage of existing riprap for replacement on slopes.

Large, Keith

From: Tim Furey [tjfurey@montana.com]
Sent: Friday, October 17, 2008 11:57 AM
To: Large, Keith
Subject: Stimson Lumber Cooling Pond EE/CA

MEMO

TO: Keith Large
FROM: Representative Tim Furey, HD 91
RE: Stimson Lumber Cooling Pond
DATE: October 16, 2008

The contamination of the Stimson Lumber Cooling Pond came as quite a surprise for most of the Bonner community. The presentation made by DEQ and the Governor this summer made it clear that something has to be done as soon as possible. I would like to submit my comments regarding the pond, contaminant removal/storage and the restoration.

1. I agree with the recommendations of DEQ based on Alternative 6, which is dry excavation of contaminants with an off site deposit at a solid waste landfill.
2. I also agree that this is the best possible time to restore the river back to its original banks by removing the pond and the protection berm.
I see the restoration of the river bank as potentially a joint project between Stimson, the State, the Federal Government and possibly Champion/Anaconda Co..

The Stimson Lumber Mill site is an extremely valuable industrial asset for the area surrounding Bonner. I encourage that this project be started and completed as soon as possible. This is an opinion held by many people in the community. Thank you for all your hard work on this project.

Sincerely,

Tim Furey

Tim Furey
Montana House of Representatives
District 91 "Three Rivers District"
P.O. Box 56
Milltown, MT 59851
406-546-6025

October 9, 2008

Keith Large
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Dear Keith,

The Clark Fork Coalition has reviewed the Engineering Evaluation/Cost Analysis for the Stimson Lumber Company Cooling Pond, and we are submitting the following comments.

We agree completely with your assessment that Alternative 6 is the best option and preferred alternative for cleanup of the cooling pond. Complete excavation of PCB-contaminated soils from the Blackfoot floodplain and removal to the local landfill will provide the best cleanup and the best protection of public health and the environment.

We are concerned about levels of PCB's detected in the aquifer. While it's likely that removing the cooling pond sediment will remove the source, it's possible that there are other sources on the Stimson site that may be contributing to this problem. Ongoing investigations should check soils in the fire pond area as well as soils in the vicinity of transformer installations for PCBs. In addition, further characterization of groundwater should be carried out to ensure that PCBs or other contaminants are not migrating off site. In particular, all wells on the Stimson property should be tested for PCBs, and all domestic or public supply wells on the down-gradient border of the site should be tested for a full suite of possible contaminants, including PCBs.

We hope that the State will continue to pursue a thorough investigation and cleanup of the Stimson site. Redevelopment of this site is critical for the economic health of the Bonner/Milltown community, and it will depend ultimately on the success of the cleanup.

Best regards,

Chris Brick
Staff Scientist
Clark Fork Coalition
P.O. Box 7593
Missoula, MT 59807

Large, Keith

From: Christine Brick [chris@clarkfork.org]
Sent: Sunday, October 12, 2008 10:05 AM
To: Large, Keith
Subject: Stimson comments
Attachments: Stimsoncooling pond.rtf

Hi Keith,

I hope it's not too late for these (attached) comments. I'm in Seattle and couldn't get my @%*& computer to work on Friday, so I'm borrowing a friend's now. Mainly, I think the cooling pond cleanup is on the right track, but I want to be sure that ongoing investigations at the site are thorough, and that as other issues are identified they are cleaned up. Also want to be sure that nothing is migrating off-site.

Thanks Keith - see you Tuesday.

Chris

10/17/2008

October 9, 2008

Keith Large, Project Officer
Remediation Division, DEQ
P.O. Box 200901
Helena, MT 59620

Dear Mr. Large:

I am sending this to you in regards to the Stimson Cooling Pond.

I would like to offer my support to have the environmental cleanup proceed in the direction for a proper cleanup that would be done expeditiously and thoroughly.

It is understandable that often these projects get slowed down with red tape and legal processes. I would encourage those involved to keep these delays to a minimum, whenever possible.

One area that could use some clarifications would be regarding the question of what the expectations are for the cleanup that Stimson is responsible for, and what parts will be taken care of by other private parties or government agencies. Stimson officials have been clear that the company will pay for the work necessary to remedy those things for which it bears responsibility. I believe it would be in the best interest if the State and other parties would step up and accept similar responsibility.

It is important to have the cooling pond properly dealt with properly, and Stimson seems ready to do that. It is important to have this area cleaned up and allowed to be used once again as a job-creating site which would be productive and beneficial to the community again, and in the near future.

Thank you

K. Whitman
11475 Chumrau Loop
Missoula, Montana 59802

October 8, 2008
Dick Greil
6205 Pine Grove Lane
Missoula, MT 59802

Keith Large, Project Officer
DEQ Remediation Division
P.O. Box 200901
Helena, Montana 59620-0901

Subject: Bonner Mill Cleanup Project

Dear Keith,

I am writing to offer my comments regarding the proposed cleanup of the former Stimson Lumber Co. Bonner sawmill site. I am disappointed that economics and the timber market have forced the company to permanently shutter its Bonner operation and put the site up for sale. Stimson has been a great part of the Bonner community for many years and they will be missed.

Before this site is sold, Stimson has committed to addressing contamination in a cooling pond on the property. I am writing to ask that the state of Montana do everything in its power to see that this cleanup not be delayed by lawyers and appeals and so on.

For the sake of Bonner, it's important that we not allow this cleanup to get caught up in legal feuds or be thrown into other restoration projects in a manner that serves no purpose. Please, please, ensure that the money Stimson pays is actually for cleanup, not to line the pockets of those who wish to delay this. It makes sense too to have the predecessor companies pay their share.

Let's get the contamination addressed promptly so this site can be readied for another business to use.

Respectfully,



Dick Greil

RECEIVED

OCT 08 2008

Dept. of Environmental Quality
Remediation Division

Jeffrey T. Patterson

13400 Turah Rd
Clinton, MT 59825
Ph. (406) 258-6246

Date: 10-08-08

Mr. Keith Large, Project Officer
Remediation Division
Montana Department of Environmental Quality (DEQ)
P.O. Box 200901
Helena, MT 59620

Dear Keith,

It is critically important to the Bonner-Milltown Community and Montana that the Stimson cooling pond cleanup be handled properly. "Properly" in my opinion is: 1.) The cleanup should include the removal of all the PCBs and other contaminants associated with the pond and affected area with a higher degree of caution and protection to the downstream environment from contamination than what we have experienced with the Dam removal. 2.) A balance of responsibility for the cost of cleaning up that weighs more than just Stimson. While it may be argued that Stimson inherited the environmental hazards with the purchase of the property, they are not the origin of the problem, probably not the majority contributor to the overall contamination, nor have they been the sole beneficiary of the mill operations during their ownership. While Stimson should be responsible for their part in the cleanup, they should not be saddled with solving every environmental problem caused by others in the past or problems that are a result of the Milltown Dam removal.

There is something to be said for the fact that Stimson has been a good member of the community and has provided good paying jobs for many local families for many years. Punishing them as they are working toward a positive exit from our community after being economically forced out by a dying timber industry will send the wrong message to other businesses that may be considering the purchase of this site, or any other site in the state. We trust that the DEQ is eying this project in a manner that gets the job done without harming Montana's business climate by forewarning potential industry that doing business here could mean unreasonable obligations. Attracting new industry into the mill site is essential to the survival of Bonner-Milltown and Missoula County at large. It is a great location that should not sit idle long.

We appreciate the attention the Montana DEQ, DNRC and Stimson have given to this issue and we ask you to continue working together to fashion an effective, reasonably priced cleanup. Thank you.

Sincerely,


Jeffrey T. Patterson

RECEIVED

OCT 09 2008

Dept. of Environmental Quality
Remediation Division

October 8, 2008

Keith Large, Project Officer
Remediation Division, DEQ
P.O. Box 200901
Helena, MT 59620

Dear Mr. Large,

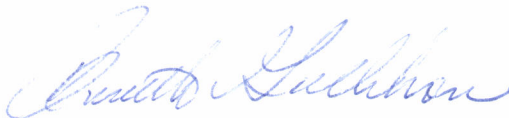
Thank you for considering my comments regarding the Stimson Cooling Pond project, and thank you and the DEQ for taking a constructive approach with the company. Our community will benefit from this cooperation.

The best way for this environmental cleanup project to benefit our community, Missoula County and the State of Montana is for the project to proceed toward a proper cleanup in a smooth and relatively speedy manor. Of course cleanup should not be secondary place to thoroughness, but these types of projects have a tendency to get slowed by bureaucracy, red tape and legal squabbles.

One area that can use some clarification regards the question of what aspects of the cleanup is Stimson responsible for, and what parts will be taken care of by other private parties or government agencies. Stimson officials have been clear that the company will pay for the work necessary to remedy those things for which it bears responsibility. It is in everyone's best interest that the State and other parties take a similar approach.

Foremost is getting the cooling pond properly dealt with, and Stimson seems ready to do that. Let's keep things moving forward so we get the site returned to a job-creating, productive use again in the near future.

Thank you



Bill & Annette Gollehon
9980 US Hwy 10 E
Missoula, MT 59802

RECEIVED

OCT 09 2008

Dept. of Environmental Quality
Remediation Division

October 7, 2008

Keith Large, Project Officer, MTDEQ
P.O. Box 200901
Helena, MT 59620-0901

Dear Mr. Large,

I write today with concerns about the cleanup at Stimson Lumber's Bonner Mill Site.

Stimson has been good to have in our community, and they are doing the right thing by working with the DEQ to clean up the cooling pond at the mill.

I've read in the Missoulian that the old Bonner site has the potential to become a new industrial facility that will provide our community with economic revitalization. We need to move quickly to get these jobs in our town and a new tax base. Don't let this process become drawn out.

The State of Montana should do everything it can to help Stimson Lumber to expedite the cleanup process and bring the Bonner site back to life. I appreciate Governor Schweitzer taking an interest and making this happen.

Most Sincerely,



Bob Starr
P.O. Box 815
Milltown, MT 59851

RECEIVED

OCT 09 2008

Dept. of Environmental Quality
Remediation Division



BOARD OF COUNTY COMMISSIONERS
200 W BROADWAY ST
MISSOULA MT 59802-4292

BCC 2008-227
September 30, 2008

PHONE: (406) 258-4877
FAX: (406) 721-4043

Keith Large
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Dear Mr. Large:

Missoula County's Board of Commissioners strongly supports the Montana Department of Environmental Quality's preferred alternative for the remediation of the Stimson Lumber Company site in Bonner. We believe that a thorough and complete remediation of the site that removes the cooling pond and other obstructions to the river is critically important to maintain the health of the Blackfoot River and eliminate the cloud of uncertainty regarding environmental liability to future owners of the site.

We also urge that additional testing and sampling be performed in conjunction with the clean-up activities that would include monitoring of wells and drinking water wells on-site, as well as other private drinking water wells adjacent to the site.

The Stimson Lumber Company site has been an important economic anchor to the Missoula economy. With appropriate remediation, we feel that the site's excellent industrial infrastructure will attract new businesses that will continue to provide quality jobs while maintaining the health of the Blackfoot River corridor. We appreciate DEQ's efforts to remediate the site and the opportunity to comment.

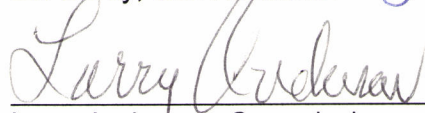
Sincerely,
BOARD OF COUNTY COMMISSIONERS



Jean Curtiss, Chair



Bill Carey, Commissioner



Larry Anderson, Commissioner

BCC/ppr
cc: Peter Nielsen, Environmental Health
Marcy Allen, BREDD Coordinator

RECEIVED

OCT 03 2008

Department of
Environmental Quality
Remediation Division

Keith Large - REM



Box 731

Milltown, MT 59851

Phone/Fax 406-258-5268

The Bonner Development Group works to facilitate projects that compliment the Bonner-Milltown community.

September 29, 2008

Director Richard Oppen
Montana Department of Environmental Quality
POB 200901
Helena, MT 59620

RECEIVED

SEP 30 2008

DEQ
DIRECTOR'S OFFICE

Re: EE/CA: Stimson Lumber Company Cooling Pond

Dear Mr. Oppen:

The Board of Directors of the Bonner Development Group proffers its support for the Department's recommendation concerning removal of the contaminants from the Stimson cooling pond as described in the Draft Final Expanded Engineering Evaluation and Cost Analysis.

The Board views the cleanup as a priority step in putting the property back into productive use. The Bonner Development Group encourages the Department of Environmental Quality and Stimson Lumber to work expeditiously in moving forward with the remedial action thus enabling a new industrial opportunity for the site that will provide good jobs and benefits for Montanans and a sustainable tax base for the Bonner Elementary School District.

Sincerely,

A handwritten signature in cursive script that reads 'Bruce Hall'.

Bruce Hall
Executive Director

Cc: Evan Barrett, Governor's Office of Economic Development
Missoula Board of County Commissioners
Jeff Webber, Stimson Lumber Company

RECEIVED

OCT 02 2008

Department of
Environmental Quality
Remediation Division



September 29, 2008

Keith Large
Montana Department of Environmental Quality
P.O. Box 200901
Helena, Montana 59620-0901

Dear Mr. Large:

The Missoula City-County Health Department Water Quality District Board has reviewed the Engineering Evaluation/Cost Analysis for the Stimson Lumber Company Cooling Pond and has several comments to submit for consideration.

First, we strongly support DEQ's proposed remediation alternative. Removing the contaminated sediments from the Blackfoot River floodplain is critically important to protect surface water and groundwater quality. In addition, removal of the pond structure from the historic river channel would reduce constriction of the floodplain and reduce potential bank erosion in this reach of the river.

We would like to offer the following comments regarding the plan:

- 1) Given the irregular distribution of the PCB and hydrocarbon contamination, we believe that additional sampling and characterization of the sediments is needed in order to complete the remedial design, ensure that all the impacted material is removed, and to provide better guidance in determining what material can be disposed of at the Allied Waste Landfill, and what will have to go to a TSCA landfill.
- 2) Some sampling between the pond and the buildings would be helpful to rule out potential source areas near PCB transformer installations.
- 3) Given the identified hydrocarbon impacts at the fire pond, sediments should be collected and analyzed for PCBs.
- 4) All monitoring wells and drinking water wells on the mill property should be sampled and analyzed at an appropriate detection limit for PCBs and hydrocarbons, as well as public and private drinking water wells immediately adjacent to the mill property, including the First Street Well.
- 5) An updated inventory of all PCB-containing transformers and any other PCB-containing devices on site should be provided, including age and condition of each. Appropriate measures should be taken to prevent future releases from any PCB transformers.
- 6) We agree that this remediation should be expedited to the extent possible, given the proximity to the river and the changing conditions related to dam removal.

We appreciate DEQ's efforts to remediate this site and protect public health and the environment. Thank you for the opportunity to comment.

Sincerely,

Garon Smith
Chairman, Missoula City-County Water Quality District Board

RECEIVED

OCT 08 2008

Dept. of Environmental Quality
Remediation Division

Large, Keith

From: Merrill Bradshaw [merrill@blackfoot.net]

Sent: Thursday, September 25, 2008 8:50 PM

To: Large, Keith

Subject: Stimpson sludge

Dear Keith,

According to the EPA (Federal Register, 53 FR 33314, 33344, 33345 1988), all landfills will eventually leak. And the regulations let landfill operators off the hook for future liability after 30 years. Landfill warranties and landfill caps typically last only 20 years.

So, how can any disposal of the contaminated sludge from the Stimpson cooling ponds in the Allied landfill in Missoula, provide long term disposal and security ?

I think it is a bad idea to send any "impacted material" to the Allied landfill above Missoula. Just because most of us won't be around when the landfill does eventually leak, and the leachate catch systems break down, doesn't mean that getting the impacted material out of site for the time being will work for the long haul. Fifty years from now the Allied landfill will----- (you fill in the blank).

Sincerely,

Merrill Bradshaw
merrill@blackfoot.net

9/29/2008

SEP 22 2008

September 17, 2008

Richard Oppen, Director
Montana Department of Environmental Quality
PO Box 200901
Helena, MT 59620-0701

Re: Expanded Engineering Evaluation and Cost Analysis:
Stimson Lumber Company Cooling Pond

Dear Director Oppen:

For more than 100 years, the wood products industry provided quality jobs and tax base for the community of Bonner and the surrounding area. Due to market conditions and fiber supply issues, Stimson Lumber Company, the current owner of the Bonner mill site, reduced employment and production at the plywood mill over a period of years and closed the facility in the summer of 2007. At one time, the Bonner plywood mill was the largest in North America. Similar problems pushed the company to downsize its saw mill operation, also located at the Bonner site, last year and to close that facility earlier this year. These reductions and closures have resulted in the loss of hundreds of manufacturing jobs. The community has also struggled to adjust to the loss of tax base caused by removal of the Milltown dam.

Despite the closure of operations at Stimson's Bonner mill, there is an opportunity to attract new industry to the community. Stimson's Bonner property is a valuable asset for economic development that would benefit the community, as well as Missoula County and the State of Montana. Consisting of more than 100 acres of industrial property served by an excellent network of transportation and utility services, the property is unique and potentially very attractive to other manufacturing and industrial companies.

RECEIVED

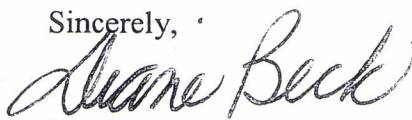
OCT 02 2008

Department of
Environmental Quality
Remediation Division

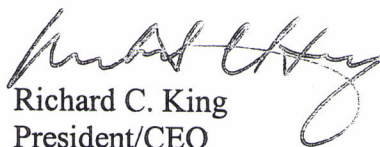
Stimson Lumber Company has retained a highly competent consultant to assist it with recruitment of a new industrial operation to Bonner that would create good jobs for the existing industrial workforce that lives in the area. The company is also proceeding with a comprehensive environmental analysis of the entire site. We are encouraged that the company is working closely with your Department to resolve the issue of contamination in the cooling pond located on the site. As you know, Governor Schweitzer recently visited Bonner to call attention to remediation work needed at the site as well as its economic importance to the area. In our view, the transition efforts under way fit neatly into the governor's "restoration economy" initiative.

The Board of Directors of the Missoula Area Economic Development Corporation strongly supports the recommendations regarding removal of contaminants from the cooling pond, especially PCBs, included in the "Draft Final Expanded Engineering Evaluation/Cost Analysis for the Stimson Lumber Company Cooling Pond." We also request that the cooling pond cleanup be made a top priority for DEQ. By working together, the company and the Department can complete the cleanup of the site in a timely fashion, which will clear the way for recruitment of companies that can bring new high quality jobs to the Bonner community.

Sincerely,



Diane Beck
Chairperson



Richard C. King
President/CEO

Cc: Evan Barrett, Governor's Office of Economic Development
Missoula County Board of Commissioners
Jeff Webber, Vice President Manufacturing, Stimson Lumber Company



September 16, 2008

Keith Large
Montana Department of Environmental Quality
P.O. Box 200901
Helena, Montana 59620-0901

Dear Mr. Large:

The Missoula Water Quality Advisory Council has reviewed the Engineering Evaluation/Cost Analysis for the Stimson Lumber Company Cooling Pond and has several comments to submit for consideration.

First, we strongly support DEQ's proposed remediation alternative. Removing the contaminated sediments from the Blackfoot River floodplain is critically important to protect surface water and groundwater quality. In addition, removal of the pond structure from the historic river channel would reduce constriction of the floodplain and reduce potential bank erosion in this reach of the river.

We would like to offer the following comments regarding the plan:

- 1) Given the irregular distribution of the PCB and hydrocarbon contamination, we believe that additional sampling and characterization of the sediments is needed in order to complete the remedial design, ensure that all the impacted material is removed, and to provide better guidance in determining what material can be disposed of at the Allied Waste Landfill, and what will have to go to a TSCA landfill.
- 2) Some sampling between the pond and the buildings would be helpful to rule out potential source areas near PCB transformer installations.
- 3) Given the identified hydrocarbon impacts at the fire pond, sediments should be collected and analyzed for PCBs.
- 4) All monitoring wells and drinking water wells on the mill property should be sampled and analyzed for PCBs and hydrocarbons, as well as public and private drinking water wells immediately adjacent to the mill property, including the First Street Well.
- 5) An updated inventory of all PCB-containing transformers on site should be provided, including age and condition of each. Appropriate measures should be taken to prevent future releases from any PCB transformers.

RECEIVED

OCT 10 2008

Dept. of Environmental Quality
Remediation Division

- 6) We agree that this remediation should be expedited to the extent possible, given the proximity to the river and the changing conditions related to dam removal.

We appreciate DEQ's efforts to remediate this site and protect public health and the environment. Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Sean Sullivan', with a long horizontal flourish extending to the right.

Sean Sullivan
Vice-Chair, Missoula Water Quality Advisory Council



Main Office PO Box 7186 Missoula, MT. 59807

September 16, 2008

Keith Large
Montana Department of Environmental Quality
P.O. Box 200901
Helena, Montana 59620-0901

Dear Mr. Large:

Montana Trout Unlimited has reviewed the Engineering Evaluation/Cost Analysis for the Stimson Lumber Company Cooling Pond and has several comments to submit for consideration.

First, we strongly support DEQ's proposed remediation alternative. Removing the contaminated sediments from the Blackfoot River floodplain is critically important to protect surface water and groundwater quality. In addition, removal of the pond structure from the historic river channel would reduce constriction of the floodplain and reduce potential bank erosion in this reach of the river.

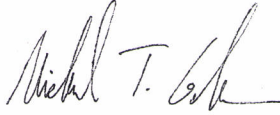
We would like to offer the following comments regarding the plan:

- 1) Given the irregular distribution of the PCB and hydrocarbon contamination, we believe that additional sampling and characterization of the sediments is needed in order to complete the remedial design, ensure that all the impacted material is removed, and to provide better guidance in determining what material can be disposed of at the Allied Waste Landfill, and what will have to go to a TSCA landfill.
- 2) Some sampling between the pond and the buildings would be helpful to rule out potential source areas near PCB transformer installations.
- 3) Given the identified hydrocarbon impacts at the fire pond, sediments should be collected and analyzed for PCBs.
- 4) All monitoring wells and drinking water wells on the mill property should be sampled and analyzed for PCBs and hydrocarbons, as well as public and private drinking water wells immediately adjacent to the mill property, including the First Street Well.
- 5) An updated inventory of all PCB-containing transformers on site should be provided, including age and condition of each. Appropriate measures should be taken to prevent future releases from any PCB transformers.

- 6) We agree that this remediation should be expedited to the extent possible, given the proximity to the river and the changing conditions related to dam removal.

We appreciate DEQ's efforts to remediate this site and protect public health and the environment. Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael T. Gibson". The signature is fluid and cursive, with the first name "Michael" being the most prominent.

Michael Gibson
Outreach Director
Montana Trout Unlimited